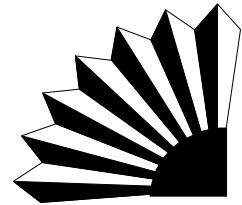


the Technical Broadcast



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Fall 1995

Cut Your File Transfer Time in Half



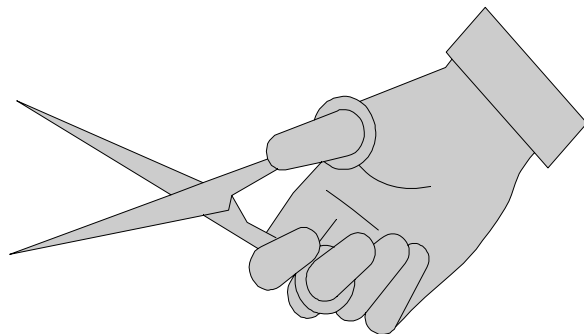
by Judy Holm

Do you have downloads or uploads between the S/390 mainframe and your PC that take more than six hours? Does your TSO session time out in the middle of downloading a huge file? If so, there may be a product that will decrease your file transfer time.

PKZIP for MVS from ASCENT Solutions, Inc. can deliver compression ratios of up to 90 percent. Data transmission time and cost may be reduced by one-half to one-tenth of current levels. The files are 'zipped' (compressed) on the mainframe, then downloaded to the PC and 'unzipped' (decompressed) by using PKUNZIP for MVS which is also included.

Features of PKZIP for MVS allow users to:

- Translate data to be compressed between EBCDIC and ASCII for compatibility with PKZIP on other platforms, such as MS-DOS, UNIX, and other versions of the program.



- Convert MVS record-oriented data into the stream-oriented data typical of PC or UNIX files.
- Encrypt a dataset into the ZIP Archive.
- Reduce errors by using Sophisticated 32-bit Cyclic Redundancy Checking (CRC).

Department of Information Services began testing PKZIP November 1, 1995, and will conclude testing November 30, 1995. If you are interested in testing the product, please contact Judy Holm at 902-3154.

Inside...

Introducing: ISPF Version 4	2	XPEDITER/CICS Profile	8
COBOL/370 and LE/370, Article Three	3	Technical Broadcast Subscription Service	11
Who Can I Call When I Can't Do My Job in CICS?	6		

Introduction: ISPF Version 4



Holm

by Judy

IBM is touting ISPF Version 4 as the 'remake of a classic.' It has the same features as before with additional versatility. ISPF is now Common User Access (CUA) compliant, which means that it acts more like a PC software package. Action bars have been added that expose functions on each screen. These bars give true 'action' functionality, utilizing pull-down and pop-up menus for option selection. However, the new version can still be used the same way as the previous version.

The most advanced new feature is a Graphical User Interface (GUI). After logging on to the mainframe, using TCP/IP, you can set up a connection to your PC and continue processing without using mainframe CPU cycles. You can edit your program, JCL, or data using the PC editor of your choice. Data will be saved on the mainframe, just as it would have been if you had used the ISPF editor.

You will now be able to have up to 32 split screens. In GUI mode, these will show up as individual windows. In 3270 mode, only two screens are displayed at one time and a Task List is used to navigate between logical screens. The SWAP command also allows navigation between screens.

The new ISPF Workplace is available as option 11. It combines 85 PDF functions into one object-action interface. Data set lists can be built and shared among users. Referral lists of active and customized lists of data

sets and libraries referenced in your ISPF session are available. These may be accessed from any action bar that has the RefList option on it.

The ISPF Parmsoption (option 0) has been combined into one screen. This option utilizes the action bar to expose all ISPF user customizations available.

Other enhancements in ISPF Version 4 allow:

- Viewing a data set. Option 1 will be View instead of Browse, although Browse is still an option in View. ISPF view is the same as the SPIFFY View that we currently have.
- Language sensitive editing. This color highlights language constructs such as DO-END, IF-THEN-ELSE, quoted strings, and comments.
- Defining and deleting VSAM clusters
- Editing data sets with a record length greater than 255.
- Multi-volume data set support. All common ISPF data set utilities can operate on data sets that span multiple volumes.
- Performance enhancements to Data Set List (option 3.4)

Future articles will deal with more of the new commands and features in ISPF

COBOL/370 and LE/370, Article Three

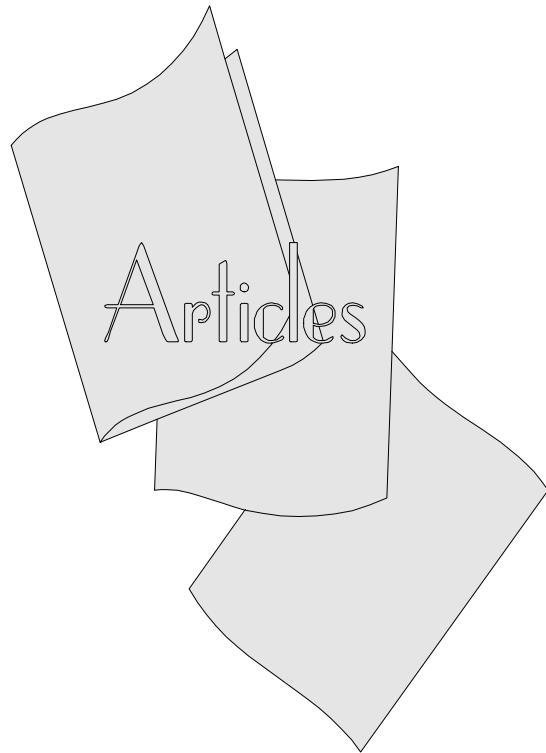


by Gary Duffield

This is the third in a series of eight articles discussing features of the COBOL/370 and LE/370 programming language. This article will discuss the CONTINUE statement and STATEMENT TERMINATION.

In the previous two articles, keywords were used to terminate logical structures. The EVALUATE statement was terminated with END-EVALUATE, PERFORM with END-PERFORM, and even IF with END-IF. Yes, you can still use a period instead of - which does seem easier than typing those extra characters.

Of course, sometimes that period can be pretty pesky, especially when it's left out or overlooked. Using the END-whatever terminator certainly is more visible. But there is an even more important reason to discontinue using the period-nesting.



Let's look back at the INLINE PERFORM from the last article:

```
PERFORM UNTIL AT-END
  IF RECORD-TYPE = '1'
    [logic]
  END-IF
  IF RECORD-TYPE = '2'
    [logic]
  END-IF
  READ FILE-IN
  AT END MOVE 'Y'
  TO EOF-SWITCH
END-PERFORM.
```

(Continued on page 4)

COBOL/370 and LE/370, Article Three

(continued from page 3)

Do you see what the problem would be if we tried to terminate our IF statements with a period? A period doesn't 'match up' to any particular statement. It just ends them all. Yet we don't want the second IF to be subordinate to the first, so we need some sort of division. In the past, we probably would have ended up using ELSE:

```
IF RECORD-TYPE = '1'
    [logic]
ELSE
    IF RECORD-TYPE = '2'
        [logic].
```

But we still would have trouble with the READ. Now, with 'intelligent' termination, the whole construct becomes much easier to code, and much easier to understand.

So, it is recommended that we virtually forget about the period. 'Virtually', because you are still required to put a period at the end of each paragraph.

What does this do to the NEXT SENTENCE statement? Well, it still looks for the next statement following a period. Hmmm, that's not always going to 'cut it', is it?

Thus, we have the CONTINUE statement. It differs from NEXT SENTENCE in that it looks for the next statement following a TERMINATOR.

Here's our example modified slightly:

```
PERFORM UNTIL AT-END
    IF RECORD-TYPE = '1'
        [logic]
    ELSE
        NEXT SENTENCE
    END-IF
    IF RECORD-TYPE = '2'
        [logic]
    END-IF
    READ FILE-IN
    AT END MOVE 'Y' TO EOF-SWITCH
END-PERFORM.
```

(Continued on page 5)

COBOL/370 and LE/370, Article Three

(Continued from page 4)

Where will our NEXT SENTENCE take us? To the end of the PERFORM, **which means we ‘blow out’ of the PERFORM whether AT-END is true or not!**

Let’s change it to CONTINUE:

```
PERFORM UNTIL AT-END
    IF RECORD-TYPE = '1'
        [logic]
    ELSE
        CONTINUE
    END-IF
    IF RECORD-TYPE = '2'
        [logic]
    END-IF
    READ FILE-IN
        AT END MOVE 'Y' TO EOF-SWITCH
END-PERFORM.
```

Now where do we go? To the second IF statement.

So, although typing statement terminators will require extra keystrokes (compared to typing a period), the increased flexibility and readability will be well worth it!

More information about STATEMENT TERMINATION and the CONTINUE statement can be found in:

IBM SAA AD/Cycle COBOL/370 Programming Guide (SC26-4767) and
IBM SAA AD/Cycle COBOL/370 Language Reference (SC26-4769)

The remaining articles of this series will be published in future issues of the *DIS Technical Broadcast*.

If you have any questions about these articles, please contact Gary Duffield at 902-3031. If you would like to obtain copies of all eight articles, contact Charie Martin at 902-3112. ☺

Who Can I Call When I Can't Do My Job in CICS?



by Carol Criscione

Imagine the following: You are in CICS, enter the appropriate data, press the <ENTER> key, and receive a screen display of information that is not *at all* what you expect. Worse yet, you receive a blank screen or 'long clock' for all your hard work! Your agency does not have a 'help desk.' Nor do you have the phone number of a programmer in your agency who may be able to help you.

Your coworkers make several suggestions. Unfortunately, none of them resolve the problem. What do you do next? Call the Department of Information Services Network Support Center (**DIS NSC**) **Help Desk** at **(360) 753-2454**.

These technicians (**Aaron, Anita, Chuck, Cindy, Ernie/Will, Jim, Lori, Patty, Sandy, Steve, Sue, Tom, and Darlene**) will 'find you' in the network, determine the nature of the problem, and resolve the situation. Most of the time, they are able to get you back to work in a few minutes. Sound pretty good? I think so!

How do the DIS NSC Help Desk technicians do that? They start by asking some specific questions based on collective skill and experience. Some of the information you know before calling for assistance. They can prompt you for any necessary additional information.

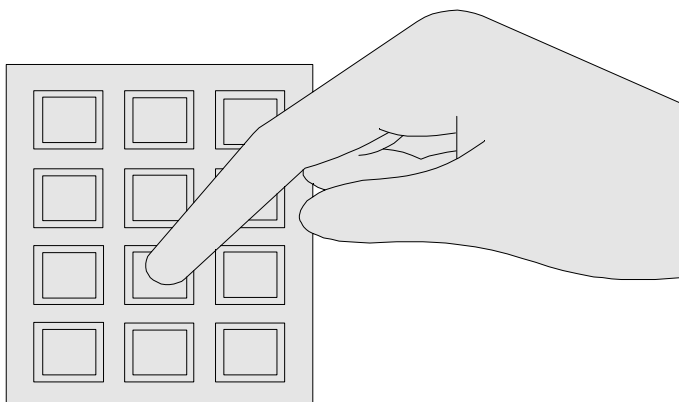
Some basic questions you may be asked are:

- 'What is your name, agency number, and telephone number?'
- 'What is your User ID?'
- 'What is your Network ID?'
- 'Are you on a LAN?'
- 'Are you signed on via TPX?'
- 'What CICS are you using?'
- 'Did you receive an error message?'
- 'When did this problem begin?'

Why do they ask these questions? How can that resolve *your* problem?

Your name, agency number, and telephone number information are basic for all calls for assistance. They are needed for problem

(Continued on page 7)



Who Can I Call When I Can't Do My Job in CICS?

(Continued from page 6)

The DIS NSC technician locates your device information in a network of literally thousands of devices. Pinpointing 'your location' is required to truly resolve the problem. Sometimes several 'layers' of communications hardware and software must be navigated to reach the original device information. Answers to questions such as:

'Are you on a local area network (LAN)?'
'What is your User ID?'
'What is your Network ID?,' and
'Are you signed on via TPX?' speed this process.

DIS maintains 35 customer CICS regions and three versions of CICS (V2.1.2, V3.3.0, and V4.1.). The answer to a question such as 'Which CICS are you using?' points to the proper CICS region and messages. The technicians sign into your CICS region to identify a CICS system problem as quickly as possible.

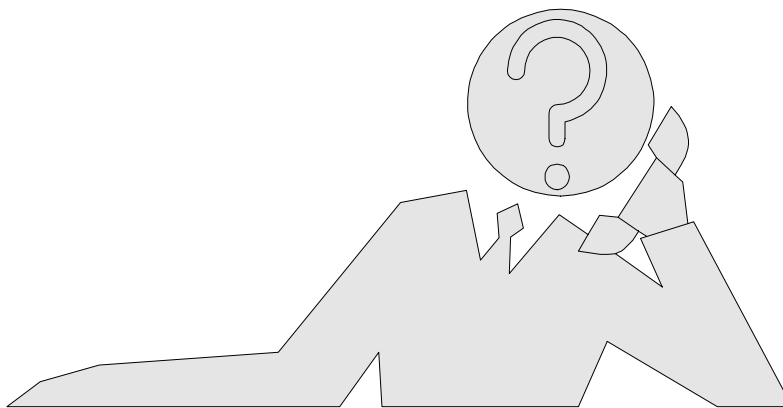
Error messages are usually helpful. These

messages can isolate whether the problem is with CICS software itself or is an application or file problem. CICS issues error messages beginning with 'DFH.' Other message prefixes normally come from non-CICS software.

Knowing when the problem began helps determine which change(s) may have triggered a problem. Anyone who introduced new or changed systems into CICS will be interested in such information. DIS uses the INFOMAN Change Management System to track its changes to the system.

Once the pertinent information has been gathered, your problem is normally resolved quickly. If that is not the case, the problem is escalated to DIS software staff for resolution all in support of getting you, the customer, back to work in the shortest time possible.

This background information should help you get your CICS problems solved



XPEDITER/CICS Profile

 by Gayle Huck

XPEDITER/CICS has profile settings that you can customize or temporarily change. When you first logon to XPEDITER/CICS, a profile of installed defaults is automatically created for you. This profile name is your userid. If you wish, you can create multiple profiles with different names.

You would then logon to XPEDITER/CICS by entering XPED P=XXXXXXX with XXXXXX being your new profile name.

To determine what your default profile settings are, enter 0.1 from Xpediter's Primary menu. The default installation

INSTALLATION DEFAULT SETTINGS:

PROFILE ==>	xxxxxxx	Current profile name
TRAP ==>	ON	(ON/OFF) Intercept all abends
MONITOR ==>	ON	(ON/OFF) Intercept all storage violations
TRACE ==>	OFF	(ON/OFF) Monitor program execution in the background

When TRAP is set to ON, XPEDITER/CICS will automatically trap all abends that occur in your session. All abends trapped during your debugging session must be resolved or released before your terminal can regain control over the program. You may be able to fix the problem on-line by using XPEDITER/CICS facilities, such as changing invalid data or bypassing the failed instruction. If this is not possible, you may end your debugging session by entering =X from any XPEDITER/CICS

screen. If you should change the INSTALLATION DEFAULT SETTINGS of TRAP to OFF, TRAP will automatically be turned back on for your current debugging session when you set a breakpoint.

When MONITOR is set to ON, XPEDITER/CICS will automatically intercept and display at your terminal an instruction that attempts to write to an area that the program you are executing does not own BEFORE it is executed.

(Continued on page 9)

XPEDITER/CICS Profile

(Continued from page 8)

When TRACE is set to ON, XPEDITER/CICS will automatically capture, in chronological order, the program instructions executed during your session.

These instructions can be accessed by pressing PF17 at a breakpoint or by accessing the 2.4 screen.

INSTALLATION DEFAULT SETTINGS changes do not take effect during your current debugging session. After changing

these settings, you must logoff of XPEDITER/CICS by going through the EXIT screen and log back on to XPEDITER/CICS to get the new profile settings.

If you wish to activate or deactivate any of the INSTALLATION DEFAULT SETTINGS during your current debugging session, you may use either the SET commands or the summary screens. The SET commands are as follows and can be entered on any XPEDITER/CICS screen:

SET TRAP ON SET MONITOR ON SET TRACE ON	SET TRAP OFF SET MONITOR OFF SET TRACE OFF
---	--

NOTE: The SET commands permanently change your INSTALLATION DEFAULT SETTINGS.

To turn any of these settings on through the Trace Summary (1.4), TRAP Summary (1.6) or Storage Protection (1.8) panels, enter a letter I in the CMD field and press

enter. To turn any of these settings off through the summary screens, enter a letter D in the CMD field and press enter.

NOTE: Your INSTALLATION DEFAULT SETTINGS will not be permanently changed if you use the summary screens to activate or deactivate

(Continued on page 10)

XPEDITER/CICS Profile

(Continued from page 9)

The following USER DEFAULT SETTINGS also found on the default profile setting screen, (0.1), can be changed at any time and take immediate effect.


You can also use SET commands to permanently change the USER DEFAULT

SETTINGS from any XPEDITER/CICS screen. The command is SET followed by the option and then the setting. For example: SET FOOT ANALYZE.

USER DEFAULT SETTINGS:

ALARM ==>	ON	(ON/OFF) Enable terminal alarm at error
ALT ==>	OFF	(ON/OFF) Set alternate screen size
DELAY ==>	0	(0-20) Set default wait intervals for stepping
FOOT ==>	KEYS	(ANALYZE/DATA/KEYS/MENU/REGS/SOURCE/STATUS/OFF)foot
JUSTIFY ==>	ON	(ON/OFF) Display the source segment of listing
KEEP ==>	5	(5/7/9/11/OFF) Open/close the KEEP window
MAXSTEP ==>	20	(1-99) Set default maximum value for execution
OPT ==>	ON	(ON/OFF) Enable 3270 data stream optimizer
SOURCE ==>	ON	(ON/OFF) Show source display at entry
AUTOKEEP ==>	ON	(ON/OFF) Show automatic keeps
CSECTS ==>	NONE	(NONE/ALL/csect-name) Specify CSECT names for selection

For further information on these USER DEFAULT SETTINGS, you may access the on-line help facility by pressing PF1 on the SET PROFILE DEFAULT screen and

access the second topic, SCREEN LAYOUT - Layout and description of fields on this screen. 

Technical Broadcast Subscription Service

 by Darlene Kosoff

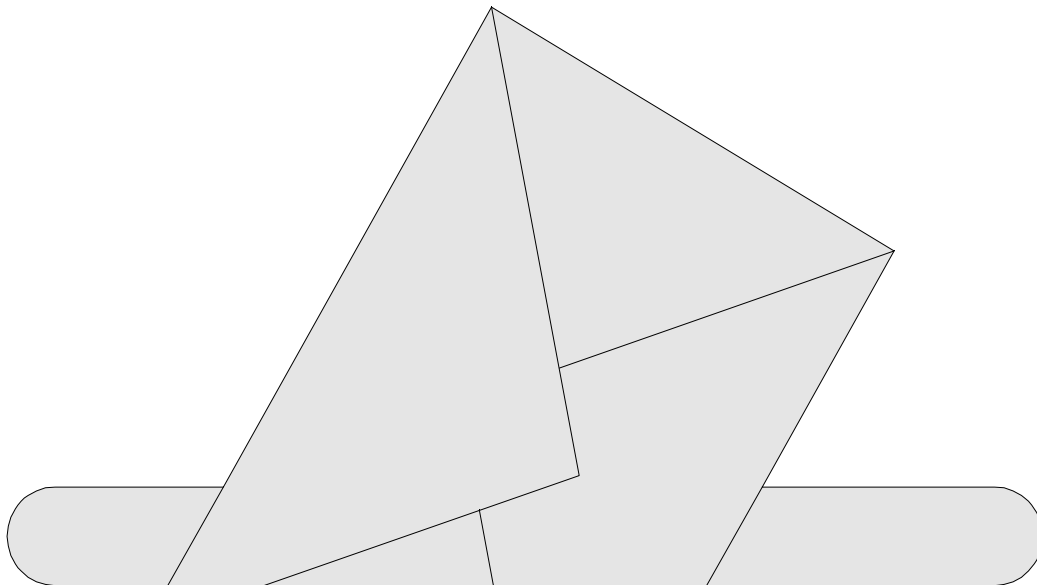
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To facilitate this process, we will manage the distribution list similar to a subscription service. We are asking customers to return the completed Subscription Renewal form within 30 days. This should be returned to DIS no later than December 27, 1995. The form must be returned to DIS in order for your subscription to be renewed.

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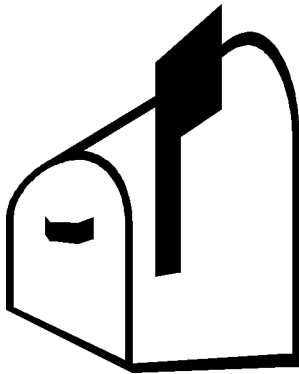
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